APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,094	10/30/2000	Robert B. Friedman	39518/248882	7881

23859 7590 06/15/2005		EXAMINER
NEEDLE & ROSENBERG, P.C.		GOLD, AVI M
SUITE 1000		

ART UNIT	PAPER NUMBER
2157	

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ATLANTA, GA 30309-3915

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/702,094	FRIEDMAN ET AL.
	Examiner	Art Unit
	Avi Gold	2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2005*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

This action is responsive to the amendment filed on March 21, 2005. Claims 1

and 24 were amended. Claims 1-31 are pending.

Response to Amendment

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

2.   Claims 1,4-7, 9-11, 14-27, and 30-31 are rejected under 35 U.S.C. 102(e) as

being anticipated by Leinwand et al., U.S. Patent No. 6,130,890.

Leinwand teaches the invention as claimed including a method and system for

improving routing decisions, particularly for Internet data packets traveling to a

destination associated with another country (see abstract).

Regarding claim 1, Leinwand teaches a method for routing network traffic,

comprising:

receiving the network traffic (col. 3, lines 9-11, Leinwand discloses a packet

traveling over a system from source to destination);

determining a destination for the network traffic (col. 3, lines 11-13, Leinwand

discloses a destination in a geographic area);

obtaining geographic information on one of a source or the destination

associated with the network traffic from a map of the network, the map being produced

as a result of:

determining a route through the network which includes one of the destination or

source (col. 3, lines 9-11);

deriving a geographic location of any intermediate hosts contained within the

route through the network, using a particular IP address associated with each

intermediate host (col. 2, lines 14-19, Leinwand discloses autonomous systems acting

as intermediate nodes to route a packet to its destination; col. 3, lines 20-44, Leinwand

discloses autonomous systems having a geographic locations and IP addresses

assigned to a system based on its geographic area);

analyzing the route and the geographic locations of any intermediate hosts, using

the particular IP address associated with each intermediate host (col. 3, lines 20-44, col.

7, lines 5-25, Leinwand discloses routers making a decision as to which of the

autonomous systems the data packet is going to next);

determining the geographic location of the source or destination, using the

particular IP address associated with each intermediate host (col. 3, lines 11-13,

Leinwand discloses separate geographic location for source and destination, col. 3,

lines 20-44); and

storing the geographic location in the map (col. 15, lines 19-34, Leinwand

discloses an autonomous system being mapped according to its geographic location);

and

directing the network traffic to a desired destination based on the geographic

location of the source or destination (col. 3, lines 9-34, Leinwand discloses a packet

being routed to its destination based on its source or destination location).

Regarding claim 4, Leinwand teaches the method as set forth in claim 1, wherein

receiving the network traffic comprises receiving a request at a host server (col. 2, lines

14-20, Leinwand discloses autonomous systems requesting traffic).

Regarding claim 5, Leinwand teaches the method as set forth in claim 1, wherein

the network traffic comprises a request, the desired destination comprises a desired

server, and wherein directing the network traffic comprises directing the request to the

desired server based on the geographic location (col. 1, lines 39-50, Leinwand

discloses a destination being linked to a geographic region and the traffic being directed

to it based on it location).

Regarding claim 6, Leinwand teaches the method as set forth in claim 1, wherein

directing the network traffic to the desired destination comprises selecting a route with a

shortest distance to the desired destination (col. 7, lines 46-52, Leinwand discloses choosing the route having the shortest length).

Regarding claim 7, Leinwand teaches the method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting a route to the desired destination having the shortest latency time (col. 9, lines 22-39, Leinwand discloses choosing a route to avoid delays in transmission).

Regarding claim 9, Leinwand teaches the method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting the desired destination based on its load (col. 11, lines 5-24, Leinwand discloses choosing a route to avoid congestion).

Regarding claim 10, Leinwand teaches the method as set forth in claim 1, wherein the geographic location comprises the geographic location of the source and directing the network traffic to the desired destination comprises selecting the desired destination because it has content associated with the geographic location (col. 11, lines 39-50, Leinwand discloses a phone call being routed to a geographic region in which the physical destination of the call is located).

Regarding claim 11, Leinwand teaches the method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting the

desired destination based on a connection speed associated with the source (col. 11,

lines 5-24, Leinwand discloses choosing a route having the fastest speed for the data

packet).

Regarding claim 14, Leinwand teaches the method as set forth in claim 1,

wherein directing the network traffic comprises selecting a route based on

interconnection speeds within the network (col. 11, lines 5-24, Leinwand discloses

choosing a route having the fastest speed between nodes for the data packet).

Regarding claim 15, Leinwand teaches the method as set forth in claim 1, further

comprising analyzing the network (col. 7, lines 5-25, Leinwand discloses a router

making a decision as to which route to take).

Regarding claim 16, Leinwand teaches the method as set forth in claim 15,

wherein analyzing comprises analyzing interconnections between nodes in the network

(col. 7, lines 5-25, Leinwand discloses each interconnected router making a decision

which route to go to the destination).

Regarding claim 17, Leinwand teaches the method as set forth in claim 15,

wherein analyzing comprises analyzing nodes within the network (col. 7, lines 5-25,

Leinwand discloses each router making a decision once it receives the data).

Regarding claim 18, Leinwand teaches the method as set forth in claim 15, wherein analyzing comprises modeling behavior of the network (col. 7, lines 5-25, Leinwand discloses routers choosing routes for the packets).

Regarding claim 19, Leinwand teaches the method as set forth in claim 18, wherein modeling comprises approximating the behavior at nodes (col. 7, lines 5-23, Leinwand discloses autonomous systems receiving reachability information in order to determine the routes).

Regarding claim 20, Leinwand teaches the method as set forth in claim 18, wherein modeling comprises simplifying the map of the network by combining nodes in traffic routes (col. 1, lines 39-50, Leinwand discloses calls routed to a geographic region; col. 2, lines 21-32, Leinwand discloses router acting as a node for data to access multiple routes).

Regarding claim 21, Leinwand teaches the method as set forth in claim 1, wherein obtaining the geographic information comprises generating the map of the network (col. 15, lines 19-34).

Regarding claim 22, Leinwand teaches the method as set forth in claim 1, wherein obtaining the geographic information comprises querying a system for the geographic information and receiving a response from the system with the geographic

information (col. 3, lines 9-44, Leinwand discloses obtaining information relating to an autonomous system which includes its geographic information).

Regarding claim 23, Leinwand teaches the method as set forth in claim 1, wherein the network comprises the Internet and the network traffic comprises packets (col. 4, lines 36-38, Leinwand discloses network traffic comprised of packets routed over the Internet).

Claims 24-27 and 30-31 do not teach or define any new limitations above claims 1, 7, 9, and 11 and therefore are rejected for similar reasons.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leinwand further in view of Zhang et al., U.S. Patent No. 6,324,585.

Leinwand teaches the invention substantially as claimed including a method and system for improving routing decisions, particularly for Internet data packets traveling to a destination associated with another country (see abstract).

As to claims 2 and 3, Leinwand teaches the method of claim 1.

Leinwand fails to teach the limitation further including the use of a domain name service inquiry.

However, Zhang teaches a method and apparatus for resolving a Domain Name Service request in a system where it is possible for the user to connect to more than one network at a time (see abstract). Zhang teaches the use of domain name service (col. 1, lines 34-42).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Leinwand in view of Zhang to use a domain name service inquiry. One would be motivated to do so because a domain name service enables the central managing of host names to IP addresses.

6.   Claims 8, 12, 13, 28, and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Leinwand further in view of Buhrke et al., U.S. Patent No. 5,231,631.

Leinwand teaches the invention substantially as claimed including a method and system for improving routing decisions, particularly for Internet data packets traveling to a destination associated with another country (see abstract).

As to claims 8, 12, 13, 28, and 29, Leinwand teaches the method of claims 1 and 24.

Leinwand fails to teach the limitation further including the selection of a route based on bandwidth.

However, Buhrke teaches a method and apparatus for controlling overflow traffic in a data network (see abstract). Buhrke teaches the use of selecting a route based on having the most available bandwidth, selecting the amount of bandwidth available at the destination, and selecting the destination based on the amount of bandwidth available at it (col. 1, lines 65-67; col. 2, lines 1-66).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Leinwand in view of Buhrke to select a route of traffic based on bandwidth. One would be motivated to do so because decisions based on bandwidth help avoid congestion in data traffic.

Claims 28 and 29 do not teach or define any new limitations above claims 8 and 13 and therefore are rejected for similar reasons.

Response to Arguments

7.   Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

Regarding the argument to claims 1 and 24, the applicant argues that the reference, Leinwand, does not disclose using a particular IP address associated with each intermediate host. The examiner disagrees, as seen in, column 3, lines 9-48, there are IP addresses assigned to a system based on its geographic area. In addition, the applicant is relying on the background of the invention for their argument.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

    U.S. Pat. No. 6,272,150 to Hrastar et al.

    U.S. Pat. No. 6,266,607 to Meis et al.

    U.S. Pat. No. 6,151,631 to Ansell et al.

    U.S. Pat. No. 6,285,748 to Lewis.

    U.S. Pat. No. 6,347,078 to Narvaez-Guarnieri et al.

    U.S. Pat. No. 5,774,668 to Choquier et al.

    Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Avi Gold whose telephone number is 571-272-4002.

The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.
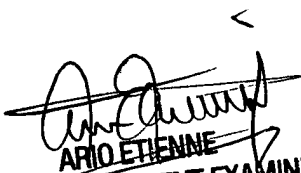
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

Art Unit 2157

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